

IN THE CLAIMS:

Please amend claim 4 as follows:

Claims 1- 3. (Cancelled)

Claim 4. (Currently Amended) An apparatus for determining a stability margin (SM) with respect to a possible self-oscillation in a radio frequency repeater receiving, amplifying and retransmitting radio frequency signals between an input and an output, and operating with a predetermined delay between the input and the output, and having a feedback path between said output and said input, said apparatus comprising

at least one sensing element connected to at least said output of the repeater,

at least one measurement receiver connected to said at least one sensing element for measuring at least an output signal from said repeater, on the basis of which the stability margin is calculated,

said sensing element establishing an amplification of the repeater as a function of the radio frequency signals in a frequency band, and

a magnitude (MA) of harmonic variations in a signal level for various frequencies measured by the at least one measurement receiver constituting a measure

of the stability margin in that an increase of the magnitude of the harmonic variations corresponds to a decrease of the stability margin and vice versa.

Claim 5. (Original) The apparatus as defined in claim 4, wherein said at least one sensing element comprises at least one directional coupler.

Claim 6. (Previously Presented) The apparatus as defined in claim 5, wherein two directional couplers are connected to a single measurement receiver via a switch for alternating measurement of the signals at the output and the input, respectively.

Claim 7. (Previously Presented) The apparatus as defined in claim 4, wherein said measurement receiver is connected to a control unit for controlling the gain of said repeater.

Claim 8. (Previously Presented) The apparatus as defined in claim 4, wherein said measurement receiver is connectable, via a modem, to a central operational monitoring unit so that the measurements are made by remote control.

Claim 9. (Previously Presented) The apparatus as defined in claim 4, wherein a band pass filter is inserted between said sensing element and said measurement receiver.

Claim 10. (Previously Presented) A repeater system, including a radio frequency repeater having two antennas and two links there between, said two links comprising an uplink for amplifying signals from a mobile telephone to a base station and a downlink for amplifying signals from said base station to said mobile telephone, said repeater system being provided with an apparatus as defined in claim 4.